

Title (en)

METHOD AND APPARATUS FOR ESTABLISHING UPLINK MULTI-USER MULTI-INPUT MULTI-OUTPUT

Title (de)

VERFAHREN UND VORRICHTUNG ZUM AUFBAU VON UPLINK-MULTI-INPUT-MULTI-OUTPUT FÜR MEHRERE BENUTZER

Title (fr)

PROCÉDÉ ET APPAREIL POUR L'ÉTABLISSEMENT D'UNE ENTRÉE MULTIPLE SORTIE MULTIPLE MULTIUTILISATEUR DE LIAISON MONTANTE

Publication

EP 3133859 A4 20170628 (EN)

Application

EP 14893637 A 20140530

Priority

CN 2014078918 W 20140530

Abstract (en)

[origin: EP3133859A1] Embodiments of the present application provide an uplink multi-user multi-input multi-output establishment method, where the method includes: broadcasting, by a network side device, an uplink data sending announcement; receiving buffer information sent by a terminal that needs to send data, where the buffer information includes at least a sending level and a data sending length of to-be-sent data; determining, according to the buffer information, scheduling information for establishing uplink multi-user multi-input multi-output; and sending, to a terminal that is allowed to send data and selected from the terminal that needs to send data, a clear to send frame that carries the scheduling information, so that the terminal that is allowed to send data sends the to-be-sent data according to the scheduling information. The embodiments of the present application effectively implement uplink multi-user multi-input multi-output establishment, so that signaling interworking is reduced, resource overheads are reduced, and data sending efficiency is improved.

IPC 8 full level

H04W 24/10 (2009.01); **H04W 72/12** (2009.01)

CPC (source: EP US)

H04B 7/0452 (2013.01 - US); **H04J 13/00** (2013.01 - US); **H04L 27/2601** (2013.01 - US); **H04W 24/10** (2013.01 - US); **H04W 72/12** (2013.01 - US); **H04W 72/20** (2023.01 - EP US); **H04W 74/002** (2013.01 - EP US); **H04W 74/0816** (2013.01 - EP US); **H04W 76/40** (2018.02 - US)

Citation (search report)

- [X] WO 2011112741 A1 20110915 - QUALCOMM INC [US], et al
- [X] US 2011090855 A1 20110421 - KIM YUN-JOO [KR]
- [A] RICHARD VAN NEE (QUALCOMM): "UL MU-MIMO for 11ac ; 11-09-0852-00-00ac-ul-mu-mimo-for-11ac", IEEE DRAFT; 11-09-0852-00-00AC-UL-MU-MIMO-FOR-11AC, IEEE-SA MENTOR, PISCATAWAY, NJ USA, vol. 802.11ac, 15 July 2009 (2009-07-15), pages 1 - 10, XP017678503
- [A] "3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Enhanced uplink; Overall description; Stage 2 (Release 11)", 29 December 2013 (2013-12-29), XP050752637, Retrieved from the Internet <URL:http://www.3gpp.org/ftp/tsg_ran/WG2_RL2/Specifications/201312_final_specs_after_RAN_62/> [retrieved on 20131229]
- [A] "3rd Generation Partnership Project; Technical Specification Group Radio Access Network; Further Advancements for E-UTRA Physical Layer Aspects (Release 9)", 3GPP STANDARD; 3GPP TR 36.814, 3RD GENERATION PARTNERSHIP PROJECT (3GPP), MOBILE COMPETENCE CENTRE ; 650, ROUTE DES LUCIOLES ; F-06921 SOPHIA-ANTIPOLIS CEDEX ; FRANCE, vol. RAN WG1, no. V1.7.0, 13 May 2014 (2014-05-13), pages 1 - 85, XP050773866
- See also references of WO 2015180131A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3133859 A1 20170222; **EP 3133859 A4 20170628**; **EP 3133859 B1 20230712**; CN 106465168 A 20170222; CN 106465168 B 20191206; EP 4040901 A1 20220810; US 10405221 B2 20190903; US 11284283 B2 20220322; US 11956661 B2 20240409; US 2017070906 A1 20170309; US 2019357072 A1 20191121; US 2022248248 A1 20220804; WO 2015180131 A1 20151203

DOCDB simple family (application)

EP 14893637 A 20140530; CN 2014078918 W 20140530; CN 201480078621 A 20140530; EP 22150221 A 20140530; US 201615357816 A 20161121; US 201916526067 A 20190730; US 202217675597 A 20220218